

What is claimed is:

1. A method of uniquely identifying resources, comprising steps of:

modeling the resources using a hierarchical schema, wherein classes in the schema correspond to resource types and wherein instances in the schema represent individual resources, each instance being associated with one of the classes according to the resource type of the individual resource represented by the instance; and

defining, at a topmost class of the hierarchical schema, a naming rule property and an instance identity property, wherein:

each class at levels of the hierarchical schema beneath the topmost level inherits the naming rule property and the instance identity property;

a value of the naming rule property for a selected class identifies properties of the selected class that enable instances of the selected class to have unique identities; and

an instance of the selected class specifies the unique identity for that instance, using the identified properties for the selected class.

2. The method according to Claim 1, further comprising the steps of:

creating an identity for a particular one of the resources, using the naming rule for the class with which a particular instance that represents the particular resource is associated; and

storing the created identity as the value of the instance identity property for the particular instance.

3. The method according to Claim 1, further comprising the step of locating a particular

2 instance that represents a particular resource using the value of the instance's identity property.

1 4. The method according to Claim 1, wherein the value of the instance identity property for a
2 selected one of the instances comprises a local identity.

1 5. The method according to Claim 4, wherein the local identity comprises a class name for the
2 class with which the instance is associated and one or more name/value pairs, wherein each
3 name/value pair comprises a property name and a value for that property name, using property
4 names specified as the value of the naming rule property for the class.

1 6. The method according to Claim 4, wherein the value of the instance identity further
2 comprises an identification of a scoping context that is required to provide uniqueness of the
3 instance identity value.

1 7. The method according to Claim 5, wherein:
2 the value of the instance identity further comprises an identification of a scoping context
3 that is required to provide uniqueness of the instance identity value; and
4 the identification of the scoping context comprises a scoping class name that identifies a
5 selected one of the classes, wherein the particular resource is unique within the selected class,
6 along with one or more name/value pairs, wherein each name/value pair comprises a scoping class
7 property name and a value for that scoping class property name, wherein the scoping class
8 property names are specified as the value of the naming rule property for the scoping class.

- 1 8. The method according to Claim 7, wherein the scoping class name is identified in the value
2 of the naming rule property for the class with which the instance is associated.
- 1 9. The method according to Claim 5, wherein the value of the instance identity further
2 comprises an identification of a root scope within which the particular resource is unique.
- 1 10. The method according to Claim 9, wherein the identification of the root scope comprises a
2 domain name within which the particular resource is located.
- 1 11. The method according to Claim 1, wherein the value of the naming rule property is
2 specified using a structured document.
- 1 12. The method according to Claim 1, wherein the value of the naming rule property is
2 specified using a structured markup language.
- 1 13. The method according to Claim 1, wherein the hierarchical schema is an object-oriented
2 schema.
- 1 14. The method according to Claim 1, further comprising the step of creating an identity for a
2 particular one of the resources, using the naming rule for the class with which a particular instance
3 that represents the particular resource is associated.

1 15. A system for uniquely identifying resources, comprising:
2 a hierarchical schema that models a plurality of resources, wherein classes in the schema
3 correspond to resource types and wherein instances in the schema represent individual resources,
4 each instance being associated with one of the classes according to the resource type of the
5 individual resource represented by the instance;
6 means for defining, at a topmost class of the hierarchical schema, a naming rule property
7 and an instance identity property, wherein:
8 each class at levels of the hierarchical schema beneath the topmost level inherits the
9 naming rule property and the instance identity property;
10 a value of the naming rule property for a selected class identifies properties of the
11 selected class that enable instances of the selected class to have unique identities; and
12 an instance of the selected class specifies a unique identity for that instance, using
13 the identified properties for the selected class; and
14 means for overriding the value of the naming rule property at any of the levels of the
15 hierarchical schema beneath the topmost level.

1 16. A computer program product for uniquely identifying resources, the computer program
2 product embodied on one or more computer-readable media and comprising:
3 computer readable program code means for accessing a hierarchical schema that models a
4 plurality of resources, wherein classes in the schema correspond to resource types and wherein
5 instances in the schema represent individual resources, each instance being associated with one of

6 the classes according to the resource type of the individual resource represented by the instance;

7 computer readable program code means for defining, at a topmost class of the hierarchical

8 schema, a naming rule property and an instance identity property, wherein:

9 each class at levels of the hierarchical schema beneath the topmost level inherits the

10 naming rule property and the instance identity property;

11 a value of the naming rule property for a selected class identifies properties of the

12 selected class that enable instances of the selected class to have unique identities; and

13 an instance of the selected class specifies a unique identity for that instance, using

14 the identified properties for the selected class; and

15 computer readable program code means for overriding the value of the naming rule

16 property at any of the levels of the hierarchical schema beneath the topmost level.

1 17. A method generating unique resource identities, comprising steps of:

2 determining a particular resource for which a unique resource identity is to be generated;

3 accessing a class hierarchy with which resources are modelled, thereby obtaining a class

4 definition for a class that corresponds to a resource type for the particular resource;

5 locating, in the class definition, a naming rule that specifies how identities for instances of

6 the class are to be generated; and

7 generating the identity for the particular resource using the located naming rule.